

REMARKS

Applicants gratefully acknowledge withdrawal of a previous indefiniteness rejection under 35 U.S.C. 112 and several previous obviousness rejections under 35 U.S.C. 103. Applicants also acknowledge entry of several new obviousness rejections discussed below.

As discussed below, Applicants have amended Claim 11 to replace the bridging term “consisting essentially of” with “consisting of,” to delete hexaconazole, metconazole, and azoxystrobin from component (a), and to incorporate the chain-length limitations of Claim 21 (now canceled) into component (b).

Claim Interpretation

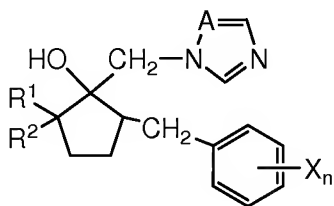
The Office Action at pages 2-3 has construed the bridging term “consisting essentially of” as being equivalent to “comprising.” In view of Applicants’ amendment of base Claim 11 to replace “consisting essentially of” with “consisting of,” Applicants respectfully submit that the proposed claim construction is no longer appropriate.

Rejections under 35 U.S.C. 103

A. Grayson as evidenced by Wingert et al in view of Aven and Herold et al

Claims 11, 14, 15, 17, and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,393,770 (“Grayson”) as evidenced by U.S. Patent 5,532,260 (“Wingert et al”) in view of EP 1023832 (“Aven”) and U.S. Published Application 2003/0144,147 (“Herald et al”). Since Herald et al has issued as U.S. Patent 6,703,346, Applicants will refer to the issued patent in discussions below. Applicants respectfully traverse.

As fully discussed in Applicants’ previous Amendment dated June 24, 2009, **Grayson** discloses fungicidal compositions containing **(1)** narrowly defined compounds of the formula



in which R¹ and R² are independently hydrogen or alkyl, A is N or CH₂, X is halogen, alkyl, or phenyl, and n is 0, 1, or 2; and **(2)** an alkoxylate of an aliphatic alcohol. E.g., column 1, lines 34-53. Among the disclosed alcohol alkoxylates (preferred members of which are described generally at column 2, lines 11-40) can be found Genapol

C-100 (see column 6, lines 5-10) and others. The Office Action at page 8 relies on Wingert et al to show that the subject compounds of Grayson include metconazole. Although Applicants believe that those skilled in the art would find no reason to include metconazole within the compositions specified in their claims, they have amended base Claim 11 to delete metconazole (as well as hexaconazole and azoxystrobin) from their component (a). Applicants submit that Grayson provides no suggestion that would lead those skilled in the art to include any of the current members of their component (a). Furthermore, as acknowledged in the Office Action at page 6, Grayson does not disclose compounds within the meaning of Applicants' components (c). However, the Office Action at pages 6 et seq relies on the teachings of Aven and Herald et al, as well as Wingert et al, to bridge the gap between Grayson and Applicants' claimed invention. Applicants respectfully submit that the teachings of the various cited references are so diverse that they would not collectively lead those skilled in the art to their claimed invention.

Aven discloses aqueous suspension concentrates comprising **(a)** 50 to 400 g/L of at least one crop protection active compound; **(b)** 50 to 500 g/L of at least one adjuvant that is capable of reducing surface tension in a resultant spray dilution to 40 mN/m or lower and does not promote particle growth of component (a) during storage of the suspension concentrate, wherein the adjuvant is selected from amine alkoxyates, polyoxyethylene triglycerides, alkyl-polyglycosides, alkenyl succinic anhydride derivatives, polyvinylpyrrolidones, perfluoroalkyl acids derivatives, and mixtures thereof or mixtures thereof with diluents; **(c)** at least one surfactant selected from (c1) 5 to 75 g/L of one or more non-ionic dispersants and (c2) 10 to 100 g/L of one or more anionic surfactants; **(d)** up to 150 g/L of one or more anti-freezing agents; **(e)** up to 25 g/L of one or more defoamers; **(f)** up to 25 g/L of one or more preservatives; and **(g)** 200 to 800 g/L of water. E.g., page 2, paragraph [0005]. However, Aven does not disclose penetration enhancers such as Genapol C-100 or other alkanol ethoxylates within the meaning of Applicants' component (b) and does not even remotely suggest that compositions containing such penetration enhancers might have any particular properties. Furthermore, even if one considers the disclosure of dispersants of both the Soprophor types and the Pluronic types, it is evident that Aven does not provide even one example in which compounds of both types are present at the same time and thus would not suggest any advantages associated with such combinations.

Herald et al discloses herbicide compositions containing imidazolinone herbicides in acid form, one form of which can be suspension concentrates that can contain other ingredients such as surfactants of various types. E.g., '346 patent at column 2, line 39, through column 3, line 28. However, Herald et al not only does not disclose penetration enhancers such as Genapol C-100 or any of the other alkanol ethoxylates within the meaning of Applicants' component (b), the reference does not disclose or suggest active ingredients other than herbicides and thus would not suggest fungicidal advantages – or any other advantages – associated with Applicants' claimed compositions.

Since none of the cited references teach Applicants' claimed combinations of narrowly defined components and since the references do not provide a reason to make such combinations, especially in the absence of any disclosure of the compounds of Applicants' component (a), Applicants maintain that the cited references, whether taken alone or in combination, do not suggest their invention.

Applicants are, of course, aware that the Supreme Court in *KSR International v. Teleflex*, 82 U.S.P.Q.2d 1385, 550 U.S. 398 (2007), allows for a flexible approach for establishing obviousness. However, Applicants maintain that the mere disclosure of individual components within a group of references does not suggest their combination even under the liberal standard for obviousness set out in the *KSR* decision. As recently explained by Judge Rader in a discussion of "obvious to try" analyses in the decision *In re Kubin*, 90 U.S.P.Q.2d, 1417, 561 F.3d 1351 (Fed. Cir. 2009), the proper analytical framework requires the consideration of two classes of situations where "obvious to try" can be erroneously equated with obviousness, one of which applies when one varies disclosed parameters until possibly finding a successful result and the other of which applies when prior art gives only general guidance about a new technology or promising field of experimentation (in contrast to the predictable pursuit of known options to arrive at predictable solutions as contemplated by *KSR*). See *In re Kubin*, 90 U.S.P.Q.2d at 1423 (citing and quoting *In re O'Farrell*, 7 U.S.P.Q.2d 1673, 1681, 853 F.2d 894, 903 (Fed. Cir. 1988), as well as contrasting *KSR*). When considering the first situation, Judge Rader cautioned that "where a defendant merely throws metaphorical darts at a board filled with combinatorial prior art possibilities, courts should not succumb to hindsight claims of obviousness." *In re Kubin*, 90 U.S.P.Q.2d at 1423 (emphasis added). Although the Office Action (specifically at page 7) includes a theoretical rationale for why the

teachings of how the cited references might be combined, Applicants can find nothing more than a hindsight construction. Applicants submit that those skilled in the art – even though finding some of the individual elements of their claimed invention by picking and choosing from among a host of possible compounds in the various references – would not have any expectation of the advantages found by Applicants for their narrowly defined combinations, particularly since not one of the cited references discloses the active ingredients of their component (a).

Applicants therefore respectfully submit that their claimed invention is not rendered obvious by Grayson as evidenced by Wingert et al in view of Aven and Herald et al.

B. Grayson as evidenced by Wingert et al in view of Aven and Herold et al and in further view of Mauler-Machnik et al and Heinemann et al

Claim 16 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Grayson as evidenced by Wingert et al in view of Aven and Herold et al and in further view of U.S. Patent 6,559,136 (“Mauler-Machnik et al”) and WO 97/27189 (“Heinemann et al”). As pointed out in the Office Action at page 12, Heinemann et al has a U.S. counterpart U.S. Patent 6,103,717 used as an English language equivalent. (Applicants also note that U.S. Patent 6,407,233 is also a counterpart of Heinemann et al.) Applicants respectfully traverse.

As discussed above, **Grayson** discloses fungicidal compositions containing fungicidal compounds not within the scope of Applicants’ claims in conjunction with alcohol alkoxylates that include, inter alia, Genapol C-100. However, Grayson not only fails to disclose or suggest Applicants’ fungicidal component (a), the reference also fails to disclose or suggest Applicants’ component (c). For the reasons discussed immediately above with respect to the rejection of Claims 11, 14, 15, 17, and 21, Applicants submit that Aven and Herald et al (as well as Wingert et al) would not bridge the gap between Grayson and their claimed invention, particularly since none of the secondary references discloses the active ingredients of Applicants’ component (a) that are absent from Grayson.

The Office Action at pages 11-12 relies upon **Mauler-Machnik et al** for teaching combinations of fungicides such as prothioconazole and **Heinemann et al** for teaching the fungicide fluoxastrobin. However, even if prothioconazole and fluoxastrobin are known fungicides, nothing in the cited references would lead those

skilled in the art to the particular narrowly defined combinations of components (a), (b), and (c) specified by Applicants

Applicants therefore respectfully submit that Claim 16 is not rendered obvious by Grayson as evidenced by Wingert et al in view of Aven and Herold et al and in further view of Mauler-Machnik et al and Heinemann et al.

C. Strom et al in view of the Stock et al article

Claims 11, 21, and 22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Published Application 2001/0051,175 ("Strom et al") in view of an article by Stock et al in *Pestic. Sci.*, 37, 233-245 (1993). Applicants respectfully traverse.

Strom et al discloses aqueous dispersions of particles having pesticidal activity comprising **(1)** about 1 to about 60 percent by weight of a pesticide having (a) a water solubility of less than 0.1 percent and (b) a melting point sufficiently high so as not to melt during milling and **(2)** a stabilizing amount of a surface active agent, wherein the dispersion has a volume mean diameter particle size not greater than about 450 nm. E.g., page 1, paragraph [0004]. Given the general nature of the pesticides described as suitable (e.g., page 1, paragraphs [0011] to [0013]) and the broad scope of surfactants described as suitable (e.g., page 1, paragraph [0014] through page 2, paragraph [0015]), those skilled in the art would hardly find a reason to make or use the particular narrowly defined combinations claimed by Applicants.

The **Stock et al article** is relied upon by the Office Action at pages 15 et seq as providing a framework for predicting agrochemical uptake using polyoxyethylene surfactant adjuvants. Even if those skilled in the art would find this article useful, they would find within the reference a teaching that best results are obtained in some cases when an alkanol alkoxylate has a high ethylene oxide content as represented by AE15 and AE20 (having 15 and 20 ethylene oxide units, respectively) but in other cases when alkanol alkoxylate has a low ethylene oxide content as represented by AE6 (having 6 ethylene oxide units). See section 3.1 at page 236 and again at page 240, as well as section 3.4 at page 242, right column, and the Abstract. Furthermore, for compounds with an intermediate log P, no correlation with ethylene oxide content was observed. See Section 3.1 at page 241, left column. Applicants submit that these results would not suggest the use of the narrowly defined alkanol-ethoxylates of Applicants' formula (I) in which n ranges from 8 to 12. However, even if all of these teachings and differences are ignored, the Stock et al article does not

disclose the fungicides specified for Applicants component (a) and does not suggest components within Applicants component (c).

Applicants therefore respectfully submit that their claimed invention is not rendered obvious by Strom et al in view of the Stock et al article.

D. Strom et al in view of Stock et al and Aven

Claims 14, 15, and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Strom et al in view of the cited article by Stock et al and in further view of Aven. Applicants respectfully traverse.

As discussed above, Strom et al discloses aqueous pesticide dispersions comprising (1) a particulate pesticide having a low water solubility and moderately high melting point and (2) a stabilizing surfactant and the Stock et al article discloses a theoretical framework for predicting agrochemical uptake using polyoxyethylene surfactant adjuvants. For the reasons discussed above, Applicants submit that Strom et al and the Stock et al article are insufficient to lead those skilled in the art to their claimed invention. Applicants also submit that Aven adds nothing that would bridge the gap between these two references and their claimed invention.

As discussed above, Aven discloses aqueous suspension concentrates comprising crop protection active compounds, certain adjuvants capable of reducing surface tension in a resultant spray dilution while not promoting particle growth during storage, non-ionic or anionic surfactants, and several optional components. However, as already pointed out above, Aven does not disclose or suggest penetration enhancers such as Genapol C-100 or other alkanol ethoxylates within the meaning of Applicants' component (b).

In view of these shortcomings of the cited references, Applicants respectfully submit that their claimed invention is not rendered obvious by Strom et al in view of the Stock et al article or Aven.

E. Grayson as evidenced by Strom et al in view of the Stock et al article and in further view of Mauler-Machnik et al and Heinemann et al

Claim 16 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Grayson as evidenced by Strom et al in view of the Stock et al article and in further view of Mauler-Machnik et al and Heinemann et al. Applicants respectfully traverse.

As discussed above, Grayson discloses fungicidal compositions containing fungicidal compounds not within the scope of Applicants' claims in conjunction with alcohol alkoxylates that include, inter alia, Genapol C-100. However, Grayson fails to


disclose or suggest Applicants' components (a) and (c) as currently specified. For the reasons discussed above with respect to the rejection of Claims 14, 15, and 17, Applicants submit that the Stock et al article, Mauler-Machnik et al, and Heinemann et al (as well as Strom et al) would not bridge the gap between Grayson and their claimed invention.

The Office Action at pages 21-22 again relies upon Mauler-Machnik et al for teaching combinations of fungicides such as prothioconazole and Heinemann et al for teaching the fungicide fluoxastrobin. However, even if prothioconazole and fluoxastrobin are known fungicides, nothing in the cited references would lead those skilled in the art to the particular narrowly defined combinations of components (a), (b), and (c) specified by Applicants.

Applicants therefore respectfully submit that Claim 16 is not rendered obvious by Grayson as evidenced by Strom et al in view of the Stock et al article and in further view of Mauler-Machnik et al and Heinemann et al.

In view of the preceding amendments and remarks, allowance of the claims is respectfully requested.

Respectfully submitted,

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